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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/832,875	04/12/2001	Timothy R. Brumleve	ADV08 675	1385

7590 01/24/2003

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EXAMINER
RAMSEY, KENNETH J

ART UNIT	PAPER NUMBER
2879	

DATE MAILED: 01/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/832,875	BRUMLEVE ET AL.	
	Examiner	Art Unit	
	Kenneth J. Ramsey	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-51 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-51 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4&7 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. The restriction requirement is withdrawn since the examiner can treat all claims together without undue effort.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 34 –35, and 39-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Saver et al (5,882,237). The mercury amalgam pellets of Saver et al are readable as mercury dispensers comprising amalgam pellets. The intended use of the pellets disclosed by applicants does not result in a novel dispenser in so far as claimed.

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-26, 33-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over van der Wolf et al (3,957,328) in view of Anderson (4,449,948). Van der Wolf discloses the step of providing an amalgam a a location within an exhaust tube heating the amalgam to cause mercury vapor to fill the lamp vessel and sealing off the non-mercury component of the amalgam from the lamp vessel by separating the exhaust tube stem from the lamp vessel at a point between the amalgam body and the lamp vessel. Van der Wolf et al differs from the claim invention in that a molten amalgam is used as the mercury carrier. The alleged advantage of van der Wolf is that since the amalgam alloy is not placed within the tube the vapor pressure of the mercury is less responsive to changes in temperature of the lamp. Anderson column 1, lines 44-68 teaches that it is difficult to readily dispense a proper dosage of amalgam in a molten form which results in a excessive amount of amalgam being used to provide a sufficient dosage. Anderson teaches solid amalgam pellets, one or more of which can be provided within a lamp to accurately provide the dosage of the lamp. It would have been obvious to one of ordinary skill in the art that the essentially all of the amalgam of van der Wolf can be driven into the lamp by heating the exhaust tube to a set temperature. Thus the more accurate the dosage of amalgam in the exhaust tube, the more accurate the dosage in the lamp. Likewise it is apparent that a controlled amount of amalgam can be driven from the pellets of Anderson by heating to a set temperature. Thus the teaching of Anderson of providing one or more controlled dosages of mercury in solid pellet form is clearly applicable to the disclosure of van der Wolf and it would have been obvious to one of ordinary skill in the art to provide the amalgam of van der

Wolf in the form of pellets whereby the dosage can be more accurately controlled. As to Claims 2-12, 17-20, 23, 35-43, 50 and 51, the specific forms of the amalgam and the temperature at which the amalgam is released are well known in the art and it would have been obvious to select an optimum type and amount of amalgam as determined by the specific application of the lamp. As to claims 13, 14, 31 and 32, the time of heating is readily determined by the parameters of the lamp and dosage composition and are obviously determined by routine procedure upon selection of a known application of the lamp. As to claim 33 and dependent claims, it is well known to form a lamp body with an extended exhaust tube which is open to the atmospher and to introduce the fill materials through the open end of the exhaust tube, as to the limitation of sealing the open end of the exhaust tube prior to heating the amalgam, such is obviously required in order to prevent dangerous release of mercury vapor. As to claims 48-49, glass, quartz and ceramic are well known materials for forming mercury lamp vessels and it would have been obvious to form the dispenser portion of the same material as the lamp body since like components can be more readily joined or made as one body.

4. Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over van der Wolf et al and Anderson as applied to claims 1-26 above, and further in view of Hansler et al. While van der Wolf recognizes the need to heat the lamp vessel prior to introducing the mercury vapor and protecting the mercury from the high temperatures of the lamp, there is no teaching of waiting until after a heat treatment of the lamp vessel to position the amalgam in its place near to the lamp body. However, this expedient

would have been obvious to one of ordinary skill; for instance the patent to Hansler et al teaches heat treating the lamp body at Figure 11 to remove moisture prior to positioning the amalgam.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Traksel is of interest for teaching a similar process but lacks a teaching of removing the portion of the exhaust tube having the residue of the amalgam subsequent to the release of the mercury therefrom.

Directions for Responses

Any formal response to this communication should be directed to examiner Kenneth Ramsey, Art Unit 2879, and either
faxed to: 703-872-9318; or mailed to: Assistant Commissioner For Patents
Washington, D.C. 20231

Technical inquiries concerning this communication should be directed to Kenneth J. Ramsey, (703) 308-2324 (voice), (703) 746-4832 (fax).

Kenneth J. Ramsey
Primary Examiner
Art Unit 2879